

AMENDMENTS TO THE CLAIMS

Please replace the pending claims with the following claim listing:

1-49. **(Canceled)**

50. **(Currently Amended)** A nitride semiconductor structure comprising on a substrate:
an n-type collector layer;
a p-type base layer formed over said n-type collector layer, wherein said p-type base layer is p-type InGaN;
an n-type emitter layer formed over directly on said p-type base layer;
an indium-containing p-type nitride semiconductor layer formed directly on said p-type base layer so as to contact a top surface of said p-type base layer, ~~the top surface having been exposed by etching said n-type emitter layer;~~ wherein said indium-containing p-type nitride semiconductor layer ~~is regrown on said top surface~~ does not contact said n-type emitter layer; and
a base electrode formed over said indium-containing p-type nitride semiconductor layer.

51. **(Currently Amended)** The nitride semiconductor structure according to claim 50, wherein said indium-containing p-type nitride semiconductor layer is p-type InGaN.

52. **(Canceled)**

53. **(Original)** The nitride semiconductor structure according to claim 51, wherein said p-type InGaN base layer has an indium mole fraction of 5 - 30%.

54. **(Currently Amended)** The nitride semiconductor structure according to claim 51, wherein said indium-containing p-type nitride semiconductor layer has an indium mole fraction higher than an indium mole fraction of said p-type InGaN base layer.

55. **(Canceled)**

56. **(Original)** The nitride semiconductor structure according to claim 55, wherein said p-type InGa_N base layer has an indium mole fraction of 5 - 30%.

57. **(Currently Amended)** The nitride semiconductor structure according to claim 55, wherein said indium-containing p-type nitride semiconductor layer has an indium mole fraction higher than an indium mole fraction of said p-type InGa_N base layer.

58. **(Original)** The nitride semiconductor structure according to claim 50, wherein said p-type InGa_N base layer has an indium mole fraction of 5 - 30%.

59. **(Currently Amended)** The nitride semiconductor structure according to claim 58, wherein said indium-containing p-type nitride semiconductor layer has an indium mole fraction higher than an indium mole fraction of said p-type InGa_N base layer.

60. **(Currently Amended)** The nitride semiconductor structure according to claim 50, wherein said indium-containing p-type nitride semiconductor layer has an indium mole fraction higher than an indium mole fraction of said p-type InGa_N base layer.

61-76. **(Canceled)**

77. **(Previously Presented)** The nitride semiconductor structure according to claim 50, further comprising a graded layer between said p-type base layer and said n-type collector layer, wherein said graded layer has an indium mole fraction that varies gradually.

78. **(Previously Presented)** The nitride semiconductor structure according to claim 51, further comprising a graded layer between said p-type base layer and said n-type collector layer, wherein said graded layer has an indium mole fraction that varies gradually.

79. **(Previously Presented)** The nitride semiconductor structure according to claim 55, further comprising a graded layer between said p-type base layer and said n-type collector layer, wherein said graded layer has an indium mole fraction that varies gradually.

80. **(Currently Amended)** The nitride semiconductor structure according to claim 50, wherein the base electrode is formed directly on said indium-containing p-type nitride semiconductor layer.

81. **(Currently Amended)** A nitride semiconductor structure comprising:
an n-type collector layer;
a p-type base layer formed over said n-type collector layer, wherein the p-type base layer has an etched top surface and is p-type InGaN;
an n-type emitter layer formed ~~over~~ directly on said p-type base layer;
an indium-containing p-type nitride semiconductor layer formed directly on the etched top surface of the p-type base layer, wherein said indium-containing p-type nitride semiconductor layer does not contact said n-type emitter layer; and
a base electrode formed over said indium-containing p-type nitride semiconductor layer.

82. **(Previously Presented)** The nitride semiconductor structure according to claim 81, wherein said indium-containing p-type nitride semiconductor layer comprises p-type InGaN.

83. **(Canceled)**

84. **(Currently Amended)** The nitride semiconductor structure according to claim ~~[[83]]~~ 81, wherein said indium-containing p-type nitride semiconductor layer has an indium mole fraction higher than an indium mole fraction of said p-type base layer.

85. **(Previously Presented)** The nitride semiconductor structure according to claim 81, further comprising a graded layer between said p-type base layer and said n-type collector layer.

86. **(Currently Amended)** The nitride semiconductor structure according to claim 50, wherein [[the]] said indium-containing p-type nitride semiconductor layer has a thickness of between 1 and 1000 nm.

87. **(Currently Amended)** The nitride semiconductor structure according to claim 50, wherein [[the]] said indium-containing p-type nitride semiconductor layer has a thickness of about 100 nm.

88. **(Currently Amended)** The nitride semiconductor structure according to claim 81, wherein [[the]] said indium-containing p-type nitride semiconductor layer has a thickness of between 1 and 1000 nm.

89. **(Currently Amended)** The nitride semiconductor structure according to claim 81, wherein [[the]] said indium-containing p-type nitride semiconductor layer has a thickness of about 100 nm.

90. **(New)** A nitride semiconductor structure comprising on a substrate:
- an n-type collector layer;
 - a p-type base layer formed over said n-type collector layer, wherein said p-type base layer is p-type InGaN;
 - an n-type emitter layer formed over said p-type base layer;
 - an indium-containing p-type nitride semiconductor layer formed directly on said p-type base layer so as to contact a top surface of said p-type base layer, wherein said indium-containing p-type nitride semiconductor layer has an indium mole fraction higher than the indium mole fraction of said p-type InGaN base layer; and
 - a base electrode formed over said indium-containing p-type nitride semiconductor layer.

91. **(New)** The nitride semiconductor structure according to claim 90, wherein said indium-containing p-type nitride semiconductor layer is p-type InGaN.

92. **(New)** The nitride semiconductor structure according to claim 91, wherein said p-type InGaN base layer has an indium mole fraction of 5 - 30%.

93. **(New)** The nitride semiconductor structure according to claim 90, wherein said p-type InGaN base layer has an indium mole fraction of 5 - 30%.

94. **(New)** The nitride semiconductor structure according to claim 90, further comprising a graded layer between said p-type base layer and said n-type collector layer, wherein said graded layer has an indium mole fraction that varies gradually.

95. **(New)** The nitride semiconductor structure according to claim 91, further comprising a graded layer between said p-type base layer and said n-type collector layer, wherein said graded layer has an indium mole fraction that varies gradually.

96. **(New)** The nitride semiconductor structure according to claim 90, wherein the base electrode is formed directly on said indium-containing p-type nitride semiconductor layer.

97. **(New)** The nitride semiconductor structure according to claim 90, wherein the indium-containing p-type nitride semiconductor layer has a thickness of between 1 and 1000 nm.

98. **(New)** The nitride semiconductor structure according to claim 90, wherein the indium-containing p-type nitride semiconductor layer has a thickness of about 100 nm.